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EXAMINER

RHEE, JANE J

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/828,715  
Filing Date: April 06, 2001  
Appellant(s): JARVIS ET AL.

\_\_\_\_\_  
Dority and Manning, P.A.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/31/08 appealing from the Office action mailed 6/1/07.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

3970079	Gaylord Jr.	7-1976
4410575	Obayashi et al.	10/1983

2372632

Webb

11-1942

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 123-125 are rejected under 35 U.S.C. 102(b) as being anticipated by Obayashi et al. (4410575).

As to claim 123, Obayashi et al. discloses a multilayer stitchless seam comprising a first tape portion, a first substrate portion in contact with the first tape portion (figure 6 number 3), a second tape portion in contact with the first substrate portion (figure 6 number 11), a second substrate portion in contact with the second tape portion (figure 6 number 11 and 4), and a third tape portion in contact with the second substrate portion to provide a flexible seam between the layers (figure 6 number 13) wherein at least one of the first substrate and the second substrate is a composite substrate comprising at least two layers (col. 3 line 40).

As to claim 124, Obayashi et al. discloses a third substrate portion (figure 6 number 12).

As to claim 125, Obayhasi et al. discloses wherein the seam is a welded seam (col. 4 lines 25-28).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 100-101, 103-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylord Jr. in view of Webb (2372632).

As to claim 100, Gaylord Jr discloses a five layer stitchless seam comprising a first thermoplastic tape portion (figure 13 top of number 55), a first substrate portion in contact with the first thermoplastic tape portion (Figure 13 number 68 top of number 55), a second thermoplastic tape portion in contact with the first substrate portion (figure 13 number 68 bottom of number 55), a second substrate portion in contact with the second thermoplastic tape portion (figure 13 number 68 top of number 52), and a third thermoplastic tape portion in contact with the second substrate tape portion (figure 13 number 58 bottom of number 52) to provide a flexible stitchless seam between the five layers (figure 13).

Gaylord Jr fail to disclose wherein at least one of the first thermoplastic tape portion, the second thermoplastic tape portion, and the third thermoplastic tape portion is a multilayer tape portion that runs the length of the seam and includes a first

continuous layer having a first melting point and a second continuous layer having a second melting point.

Webb teaches wherein at least one of the first thermoplastic tape portion, the second thermoplastic tape portion, and the third thermoplastic tape portion is a multilayer tape portion that runs the length of the seam and includes a first continuous layer having a first melting point and a second continuous layer having a second melting point (figure 2,3,4 and in figure 4 number 18 and 17 are different layers of the tape material thus having different melting temperatures, see col. 3 lines 5-13) for the purpose of preventing moisture from seeping between the plies of the fabric section, thus creating a water tight seam (col. 3 lines 18-19).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Gaylord with at least one of the first thermoplastic tape portion, the second thermoplastic tape portion, and the third thermoplastic tape portion is a multilayer tape portion that runs the length of the seam and includes a first continuous layer having a first melting point and a second continuous layer having a second melting point in order to prevent moisture from seeping between the plies of the fabric section, thus creating a water tight seam (col. 3 lines 18-19) as taught by Webb.

As to claim 103, Gaylord Jr. discloses at least two of the tape portions and the substrate portions are the same materials (figure 13 number 68 and col. 2 line 56). As to claim 104, Gaylord Jr. discloses the first substrate portion and the second substrate portion are different materials (figure 13 number 55 and 52). As to claim 105, Gaylord

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Jr. discloses at least one of the substrate portions comprises a barrier layer (the substrates are made of cotton fibers, rayon and rubber which can be considered as a barrier layer). As to claim 106, Gaylord Jr. discloses at least one of the substrate portions comprises a fabric (col. 3 line 23). As to claim 107, Gaylord Jr. discloses at least that both the first substrate portion and the second substrate portion comprises a fabric (col. 3 line 23).

As to claim 108, Gaylord Jr. discloses wherein at least four areas of the first and second substrate portions are bonded in a cross sectional area of the seam (figure 13 top and bottom portion of substrate 55 and top and bottom portion of substrate 52). As to wherein the seam has a strength greater than a double felled needle sew seam made with the same substrate, since Gaylord Jr. teaches that the first and second substrate is made of fabric and the tape is made of a thermoplastic material as desired by the applicant, it is inherent that the seam has a strength greater than a double felled needle sewn seam made with the same substrates.

As to claims 109-112, Gaylord Jr. discloses that at least four areas of the first and second substrates are bonded in a cross sectional areas of the seam. Since, Gaylord Jr. teaches that the first and second substrate is made of fabric and the tape is made of a thermoplastic material as desired by the applicant, it is inherent that the tensile grab strength is at least 150kg.

As to claim 113, Gaylord Jr. discloses that the seam is a welded seam (col. 4 lines 20-24).

#### **(10) Response to Argument**

In response to appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gaylord Jr. and Webb discloses two pieces of fabric joined together at the seam with a thermoplastic tape. More specifically both Gaylord Jr. and Webb discloses that the thermoplastic tape comprises a vinyl type material (Gaylord Jr. , col. 2 line 57 and Webb, page 2 col. 1 line 9). Webb teaches that three plies of the tape is easier to handle than one layer of vinyl tape because one layer of vinyl tape can be subjected to static electricity (col. 2 lines 9-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide, Gaylord Jr. with a multilayer tape in order to provide a tape that is easier to handle as taught by Webb. Webb further teaches that the multilayer tape also provides a watertight seam. Additional advantages disclosed by Webb such as a water tight seam does not give reason to one having ordinary skill in the art not to combine the two references.

Appellant further argues that the combination of the Webb reference to the Gaylord Jr. reference would destroy the Gaylord Jr. reference because Gaylord Jr. requires that the joints between the individual panels for the body support binder to be resistant to lateral bending and Webb teaches a pliable tape. The Gaylord Jr. reference,



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discloses that the tape have “*sufficient* resistance to lateral bending” (col. 2 line 59) or a “desired *degree* of resistance to lateral bending” (col. 4 line 28-29) and does not disclose that the tape is completely resistant to lateral bending. Webb teaches a multilayer tape comprising a reinforcement middle layer and vinyl type material as the exterior layers (page 2 col. 1 lines 5-10). The term “pliable” disclosed by Webb does not mean that the tape disclosed by Webb does not have “sufficient resistance to lateral bending”. All materials are pliable to a degree and have a resistance to lateral bending to a degree, therefore, the tape disclosed by Gaylord Jr. can also be described as pliable.

Furthermore, Gaylord Jr’s tape is pliable because the tape is bent around the fabric in figures 10-13 and only by the process of the tape being fused to join the fabrics together does the tape provide a desired degree of resistance to lateral bending. Both Gaylord Jr. and Webb discloses a thermoplastic tape which comprises a vinyl type material therefore the same material would have sufficient resistance to lateral bending.

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to appellant's argument that Obayashi et al. fail to disclose a third substrate portion, Obayashi et al. discloses a third substrate portion in figure 6 which could be a portion of fabric 1 or fabric 2. One fabric can have many substrate portions. Appellant did not claim a third substrate but a third substrate *portion* which can read on any portion of fabric 1 or fabric 2 in figure 6. Appellant did not claim a particular area in which the third substrate portion must reside at but merely claim that this multilayer stitchless seam comprises a third substrate portion, therefore, Obayashi et al. does disclose a third substrate portion.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jane Rhee/

Primary Examiner, Art Unit 1795

2/27/08

Conferees:

Patrick Ryan /PATRICK RYAN/

Supervisory Patent Examiner, Art Unit 1795

William Krynski /William Krynski/

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